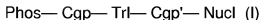


In the Claims:

1. (Currently Amended) A compound having the structure (I)



wherein:

Phos is a reactive phosphorus group which specifically reacts with a reactive group on a solid support to produce a phosphorous containing linkage group,

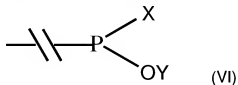
Trl is a triaryl methyl linker group having three aryl groups, wherein each of the three aryl groups are bound to a central methyl carbon, **and at least one of said three aryl groups has one or more substituents**, wherein one of said substituents is bound to Cgp and the central methyl carbon is bound to Cgp',

Cgp is a linking group linking the reactive phosphorus group and the triaryl methyl linker group, or is a bond linking the reactive phosphorus group and the triaryl methyl linker group,

Nucl is a nucleoside moiety, and

Cgp' is a linking group linking the nucleoside moiety at the 3'O or the 5'O and the triaryl methyl linker group, or is a bond linking the nucleoside moiety at the 3'O or the 5'O and the central methyl carbon of the triaryl methyl linker group; and

wherein the reactive phosphorous group has the structure (VI)



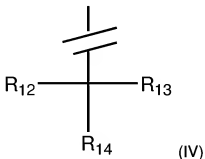
wherein:

the broken line indicates the bond to the Cgp;

X is selected from ~~the halogen or~~ **a halo group and** a secondary amino group; and

Y is selected from hydrido, hydrocarbyl, ~~or~~ **and** substituted hydrocarbyl.

2. **(Currently Amended)** The compound of claim 1, wherein the triaryl methyl linker group has the structure (IV)



wherein the broken line represents the bond to the linking group denoted Cgp' in structure (I), and

wherein **~~R12, R13, and R14~~** R₁₂, R₁₃, and R₁₄ are independently selected from unsubstituted **or and** substituted aryl groups, provided that one of **~~R12, R13, and R14~~** R₁₂, R₁₃, and R₁₄ is substituted by being bound to the reactive phosphorus group via the Cgp group.

3. **(Currently Amended)** The compound of claim 2, wherein **~~R12, R13, and R14~~** R₁₂, R₁₃, and R₁₄ are independently selected from substituted phenyl and unsubstituted phenyl, provided that one of **~~R12, R13, and R14~~** R₁₂, R₁₃, and R₁₄ is substituted by being bound to the reactive phosphorus group via the Cgp group.

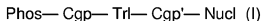
4. **(Currently Amended)** The compound of claim 2, wherein **~~R12, R13, and R14~~** R₁₂, R₁₃, and R₁₄ are independently selected from unsubstituted or substituted aryl groups selected from phenyl, biphenyl, naphthanyl, indolyl, pyridinyl, pyrrolyl, 2-thienyl, 3-thienyl, furanyl, annulenyl, quinolinyl, and anthracenyl, provided that one of **~~R12, R13, and R14~~** R₁₂, R₁₃, and R₁₄ is substituted by being bound to the reactive phosphorous group via the Cgp group.

5. **(Currently Amended)** The compound of claim 4, wherein at least one of **R12, R13, and R14** R12, R13, and R14 is selected from naphthanyl, indolyl, pyridinyl, pyrrolyl, 2-thienyl, 3-thienyl, furanyl, annulenyl, quinolinyl, and anthracenyl, provided that one of **R12, R13, and R14** R12, R13, and R14 is substituted by being bound to the reactive phosphorous group via the Cgp group.
6. **(Currently Amended)** The compound of claim 2, wherein **R12, R13, and R14** R12, R13, and R14 are independently selected from phenyl, methoxyphenyl, dimethoxyphenyl, trimethoxyphenyl, and furanyl, provided that one of **R12, R13, and R14** R12, R13, and R14 is substituted by being bound to the reactive phosphorous group via the Cgp group.
7. **(Cancelled)**
8. **(Previously Presented)** The compound of claim 1, wherein the linking group denoted Cgp' comprises a polynucleotide moiety.
9. **(Cancelled)**
10. **(Currently Amended)** The compound of claim 1, wherein X is a secondary amino group having the structure — **NQ1Q2** NQ1Q2; in which **Q1** Q1 and **Q2** Q2 are independently selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, and cycloalkynyl.
11. **(Currently Amended)** The compound of claim 1, wherein Y is selected from alkyl, lower alkyl, alkenyl, benzyl, substituted benzyl, aryl, aralkyl, cycloalkyl, electron-withdrawing β -substituted alkyl, electron- withdrawing β -substituted ethyl; electron-withdrawing substituted phenyl; ~~or~~ **and** electron-withdrawing substituted phenylethyl.

12. (Previously Presented) The compound of claim 1, wherein X is a diisopropyl amino group and Y is selected from methyl, benzyl, substituted benzyl, β -cyanoethyl, methyl- β -cyanoethyl, dimethyl- β -cyanoethyl, phenylsulfonylethyl, methyl-sulfonylethyl, *p*-nitrophenylsulfonylethyl, 2,2,2-trichloro-1,1-dimethylethyl, 2-(4-pyridyl)ethyl, 2-(2-pyridyl)ethyl, allyl, 4-methylene-1-acetylphenol, β -thiobenzoylethyl, 1,1,1,3,3,3-hexafluoro-2-propyl, 2,2,2-trichloroethyl, *p*-nitrophenylethyl, *p*-cyanophenyl-ethyl, 9-fluorenylmethyl, 1,3-dithionyl-2-methyl, 2-(trimethylsilyl)ethyl, 2-methylthioethyl, 2-(diphenylphosphino)-ethyl, 1-methyl-1-phenylethyl, 3-buten-1-yl, 4-(trimethylsilyl)-2-buten-1-yl, cinnamyl, α -methylcinnamyl, and 8-quinolyl.

13. (Currently Amended) A method comprising:

- (a) providing a solid support having an available reactive group bound thereto;
- (b) contacting said solid support with a compound having the structure
(I)



wherein:

Phos is a reactive phosphorus group which specifically reacts with a reactive group on a solid support to produce a phosphorous containing linkage group,

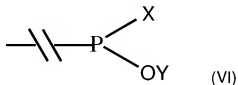
Trl is a triaryl methyl linker group having three aryl groups, wherein each of the three aryl groups are bound to a central methyl carbon, and at least one of said three aryl groups has one or more substituents, wherein one of said substituents is bound to Cgp and the central methyl carbon is bound to Cgp',

Cgp is a linking group linking the reactive phosphorus group and the triaryl methyl linker group, or is a bond linking the reactive phosphorus group and the triaryl methyl linker group,

Nucl is a nucleoside moiety, and

Cgp' is a linking group linking the nucleoside moiety at the 3'O or the 5'O **and to** the triaryl methyl linker group, or is a bond linking the nucleoside moiety at the 3'O or the 5'O **and to** the central methyl carbon of the triaryl methyl linker group; and

wherein the reactive phosphorous group has the structure (VI)



wherein:

the broken line indicates the bond to the Cgp';

X is selected from ~~the halogen or~~ a halo group and a secondary amino group; and

Y is selected from hydrido, hydrocarbyl, or substituted hydrocarbyl;

under conditions and for a time sufficient for said reactive phosphorous group to covalently bond to said solid support to produce a functionalized solid support.

14. (Previously Presented) The method of claim 13, wherein the available reactive group is selected from hydroxyl, amino, and thio.

15. (**Currently Amended**) The method of claim 14, wherein X is a secondary amino group having the structure — ~~NQ1Q2~~ **NQ₁Q₂**; in which ~~Q1~~ **Q₁** and ~~Q2~~ **Q₂** are independently selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, and cycloalkynyl.

16. (**Currently Amended**) The method of claim 14, wherein Y is selected from alkyl, lower alkyl, alkenyl, benzyl, substituted benzyl, aryl, aralkyl, cycloalkyl, electron-withdrawing β-substituted alkyl, electron-withdrawing β-substituted ethyl; electron-withdrawing substituted phenyl; ~~or~~ **and** electron-withdrawing

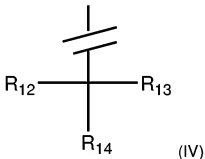
substituted phenylethyl.

17. (Original) The method of claim 13, wherein the nucleoside moiety has a hydroxyl protecting group bound thereto.

18. (Previously Presented) The method of claim 17, said method further comprising contacting the functionalized solid support with a combined deprotection/oxidation agent.

19. (Original) The method of claim 18, wherein the combined deprotection/oxidation agent comprises an alpha effect nucleophile.

20. (Currently Amended) The method of claim 13, wherein the triaryl methyl linker group has the structure (IV)



wherein the broken line represents the bond via which the triaryl methyl linker group is bound to the nucleoside moiety, and

wherein ~~R12, R13, and R14~~ R₁₂, R₁₃, and R₁₄ are independently selected from unsubstituted ~~or~~ and substituted aryl groups, provided that one of ~~R12, R13, and R14~~ R₁₂, R₁₃ and R₁₄ is substituted by being bound to the reactive phosphorus group.

21. (Currently Amended) The method of claim 20, wherein ~~R12, R13, and R14~~ R₁₂, R₁₃, and R₁₄ are independently selected from substituted phenyl

and unsubstituted phenyl, provided that one of **~~R12, R13, and R14~~** ~~R12, R13, and R14~~ is substituted by being bound to the reactive phosphorus group.

22. **(Currently Amended)** The method of claim 20, wherein **~~R12, R13, and R14~~** ~~R12, R13, and R14~~ are independently selected from unsubstituted or substituted aryl groups selected from phenyl, biphenyl, naphthanyl, indolyl, pyridinyl, pyrrolyl, ~~thiophenyl~~ 2-thienyl, 3-thienyl, furanyl, annulenyl, quinolinyl, and anthracenyl.

23. **(Currently Amended)** The method of claim 20, wherein at least one of **~~R12, R13, and R14~~** ~~R12, R13, and R14~~ is selected from naphthanyl, indolyl, pyridinyl, pyrrolyl, ~~thiophenyl~~ 2-thienyl, 3-thienyl, furanyl, annulenyl, quinolinyl, and anthracenyl.